

- Hanson, R. K., Gordon, A., Harris, A. J. R., Marques, J. K., Murphy, W. D., Quinsey, V. L., & Seto, M. C. (2002). First report of the collaborative outcome data project on the effectiveness of psychological treatment for sex offenders. *Sexual Abuse: A Journal of Research and Treatment*, 14, 169–194.
- Laws, D. R., & Marshall, W. L. (1990). A conditioning theory of the etiology and maintenance of deviant sexual preference and behavior. In W. L. Marshall, D. R. Laws, & H. E. Barbaree (Eds.), *Handbook of sexual assault: Issues, theories, and treatment of the offender* (pp. 209–229). New York: Plenum Press.
- Laws, D. R., & Marshall, W. L. (2003). A brief history of behavioral and cognitive-behavioral approaches to sexual offenders: Part 1. Early developments. *Sexual Abuse: A Journal of Research and Treatment*, 15(2), 75–92.
- Laws, D. R., & O'Donohue, W. (Eds.). (1997). *Sexual deviance: Theory, assessment, and treatment*. New York: Guilford Press.
- Marshall, W. L., Anderson, D., & Fernandez, Y. M. (1999). *Cognitive behavioural treatment of sexual offenders*. New York: Wiley.
- Marshall, W. L., & Laws, D. R. (2003). A brief history of behavioral and cognitive-behavioral approaches to sexual offenders: Part 2. The modern era. *Sexual Abuse: A Journal of Research and Treatment*, 15(2), 98–120.
- Marshall, W. L., Serran, G., Moulden, H., Mulloy, R., Fernandez, Y. M., Mann, R. E., & Thornton, D. (2002). Therapist features in sexual offender treatment: Their reliable identification and influence on behavior change. *Clinical Psychology and Psychotherapy*, 9, 395–405.
- Ward, T. (1999). A self-regulation model of the relapse process in sexual offenders. In B. K. Schwartz (Ed.), *The sex offender: Theoretical advances, treating special populations and legal developments* (pp. 6.1–6.8). Kingston, NJ: Civic Research Institute.
- Ward, T. (2002). Good lives and the rehabilitation of offenders: Promises and problems. *Aggression and Violent Behavior: A Review Journal*, 7, 513–528.

RECOMMENDED READINGS

- Marshall, W. L., Fernandez, Y. M., Hudson, S. M., & Ward, T. (Eds.). (1998). *Sourcebook of treatment programs for sexual offenders*. New York: Plenum Press.
- Schwartz, B. K. (Ed.). (2002). *The sex offender: Current treatment modalities and systems issues* (Vol. IV). Kingston, NJ: Civic Research Institute.

Sleep Disorders

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Keywords: sleep disorders, sleep apnea, insomnia, jet lag, narcolepsy

Millions of Americans suffer from sleep disorders including, but not limited to, sleep apnea, insomnia, narcolepsy, restless legs syndrome, and circadian rhythm disorders. While the quality, extent, and severity of these symptoms depend

on the nature and course of each particular condition, sleep disorders pose a serious personal and public health concern. Individuals with sleep problems may encounter a myriad of adverse nighttime and daytime sequelae ranging from frustration due to difficulty in falling or staying asleep at night, to excessive daytime sleepiness. Impaired concentration, fatigue, irritability, anxiety, depression, substance abuse (caffeine or alcohol), general physical malaise, compromised occupational performance, and interpersonal or marital distress are also among the most commonly reported symptoms. With some conditions, such as untreated narcolepsy or apnea, symptoms may even evolve into safety concerns, such as impaired driving due to the effects of sleep deprivation.

Independent of the nature of the dysfunction, sleep disorders are increasingly recognized as a growing public health concern that affects not only individuals' sleep, but also their psychological, social, and physical health. Because of underlying neuroendocrine, respiratory, and neurological etiologies, most sleep disorders are generally considered in the medical arena, and warrant appropriate medical or pharmacologic therapies. Nonetheless, behavioral, cognitive, and affective factors often serve as either contributors or consequences of sleep disorders and warrant attention to mitigate or prevent the impact of these conditions. The emerging area of behavioral sleep medicine incorporates the complex interactions between these psychological factors and physiological symptoms. Specifically, cognitive-behavioral strategies are ideally suited to help individuals manage sleep disorders and enhance quality of life for those who suffer from them.

APPLICATION OF COGNITIVE-BEHAVIORAL THERAPY

Most notably, psychophysiologic insomnia is recognized for its complex multifaceted etiology and manifestation, and is effectively conceptualized and treated through a CBT model. Treatment for primary insomnia with cognitive-behavioral strategies is well-documented and continues to be a rapidly growing area of research (Morin et al., 1999). Therapies such as stimulus control, progressive muscle relaxation, paradoxical intention, and cognitive therapy for insomnia (i.e., challenging dysfunctional beliefs and attitudes specifically about sleep) employ a variety of cognitive-behavioral principles aimed at improving sleep quality. For example, rumination about needing to get a full 8 hours of sleep every night or fear that insomnia will be fatal are common irrational beliefs that are likely to lead to cognitive or physiological arousal—states incompatible with sleep. In turn, the inability to sleep is likely to lead to further rumination, creating a vicious cycle. Employment of paradoxical

intention (requesting that the patient *try to stay awake*) or challenging maladaptive cognitions, such as “I *need* to get 8 hours of sleep to function tomorrow,” are shown to help break that cycle and therefore lead to greater sleep ability. In doing so, these therapies address the interplay between mind (e.g., cognitions) and body (e.g., levels of arousal or tension), and thereby enhance sleep quality.

While many other sleep disorders (e.g., sleep apnea, narcolepsy) have underlying physiological or neurological bases, strategies derived from cognitive-behavioral principles may be particularly useful in helping individuals prevent the exacerbation of symptoms, cope with the sequelae of such disorders, or increase compliance with medical treatment regimens. However, research on the application of cognitive-behavioral strategies for sleep disorders other than insomnia is relatively unexplored. Although very few cognitive-behavioral strategies have been empirically evaluated for disorders other than primary insomnia, the purpose of this article, therefore, is to target the psychological factors that contribute to these disorders and introduce how we can apply cognitive-behavioral models, principles, or techniques to a variety of common sleep disorders. Following is a synopsis of a select group of sleep disorders that are chosen to exemplify how cognitive and behavioral approaches are effectively or may potentially be applied.

DELAYED SLEEP PHASE SYNDROME AND ADVANCED SLEEP PHASE SYNDROME

The circadian rhythm disorders are characterized by chronophysiologic dysfunction—a desynchrony between environmental sleep/wake cycles and the actual timing of an individual’s internal circadian sleep/wake rhythm. Examples of the circadian rhythm dyssomnias are shift work sleep disorder, delayed sleep phase syndrome (DSPS), advanced sleep phase syndrome (ASPS), and jet lag. DSPS produces sleep-onset insomnia and difficulty in awakening at a desired time when sleep is delayed in relation to the desired clock time. For example, an individual plans to go to bed at 10 p.m. but cannot fall asleep until 2 a.m., this then leads to a much later awakening than anticipated since sleep onset was disrupted. In contrast, ASPS is thought of as compelling evening sleepiness, or earlier onset sleep than an anticipated sleep time resulting in an awakening that is earlier than desired.

To illustrate CBT management, take, for example, a 21-year-old college student who presents with DSPS and complains of daytime symptoms of tiredness, inconsistent academic performance, and difficulty concentrating and attending class in the early morning hours. She tends to function better during later hours of the day and evening,

and struggles with getting out of bed to attend her morning classes. Her late-night social activities, erratic sleep schedules, excessive daytime caffeine use, and frequent napping (2–3 hours in the late afternoon on most days)—all behavioral aspects—exacerbate and contribute to the problem.

From a physiological perspective, tools and therapies to buffer shifting of the circadian rhythm such as chronotherapy or bright light in the morning have met with some success (Bromley & Rajput, 1999) and may be tried with her. In addition, lifestyle changes, such as improved sleep hygiene, are often indicated to maintain regular sleep patterns and optimal daytime functioning (Carskadon, 2002). For example, keeping a regular wake-up time is critical so that the drive for sleep at night is sufficient enough to induce sleepiness at the desired bedtime. Psychoeducation to explain the adverse effects of her sleep-affecting behaviors and lifestyle, is often necessary for better sleep, but may not be sufficient in these circumstances. Cognitive and underlying beliefs also become increasingly relevant. Although she may “know the rules” and understand how behaviors affect her sleep, she may have difficulty implementing them when confronted with enticing late-night social activities or the drive to stay asleep when her alarm is buzzing at 8 a.m. For example, she may believe that “in order for me to be accepted by my peers I must party all night—no matter what cost to my sleep” or “pulling an ‘all-nighter’ will ensure I get an A.” In these circumstances, evaluation of maladaptive cognitions and unrealistic beliefs and attitudes about college life, sleep, and performance may be undertaken. For example, her report of “I *can’t* get out of bed until noon” might be reexamined and altered to “Although it’s difficult to get out of bed, I can gradually work on trying to get up by 9 a.m. every day.”

In addition, decision-making strategies that employ cost-benefit analyses may be employed to help her accommodate lifestyle changes without extensive cost to social activities or academic performance. While it may be unrealistic to keep her (or any adult) on a regimented schedule, helping her to understand the importance of sleep, her own sleep predisposition, and how it fits in with social, recreational, and academic activities would be beneficial. In a similar way, elderly individuals who are more prone to ASPS may benefit from decision-making, evaluation of dysfunctional beliefs and attitudes about sleep and performance, and cost-benefit analyses in extending bedtime and delaying wake-up time.

JET LAG

According to the ICSD (1997), jet lag is characterized by degrees of difficulty in initiating or maintaining sleep, the

existence of excessive sleepiness, decrements in subjective daytime alertness and performance, and somatic symptoms (e.g., gastrointestinal function) following rapid travel across multiple time zones. This disturbance is closely related to shift work sleep disorder which is characterized by insomnia or excessive sleepiness that occurs as a transient phenomenon in relation to work schedules that are inconsistent with one's circadian rhythm.

From a pharmacological perspective, many individuals have found relief by utilizing medications (i.e., benzodiazepines) to assist with jet lag. Unfortunately, these drugs tend to simply promote sleep rather than adjust circadian rhythms, thus leading to continued difficulties with initiation and maintenance of sleep. Although the research on melatonin is equivocal, it may be effective in increasing sleep quality and reducing subjective ratings of jet lag. Further research is needed to determine the appropriate amount and timing of administration of this substance. Light exposure therapy for jet lag has also been found to be a potential treatment for individuals attempting to readapt their circadian rhythm after a flight. Alternatively, several behavioral strategies have been recommended to reduce the impact of jet lag: select specific flights that will allow early evening arrival, anticipate the time change for trips by getting up and going to bed earlier several days prior to an eastward trip and later for a westward trip, change your watch to the destination time zone, avoid alcohol or caffeine at least 3 to 4 hours before bedtime (since both act as "stimulants" and prevent sleep), avoid heavy meals, avoid heavy exercise close to bedtime.

SHIFT WORK

Boivin and James (2003) have also examined the usefulness of melatonin in the area of shift work. While melatonin has brought about modest improvement in increasing alertness and sleep quality for those working night shifts, it has had much lower efficacy in treatment protocols compared to bright light exposure. Research has demonstrated that light exposure has been an effective means of promoting circadian adaptation to night-shift work. This light should be administered at the beginning of the shift period in short or intermittent segments. Additionally, shielding these individuals from morning light and timing the sleep/dark periods produces phase shifts, which allow the individual to engage in more appropriate sleep cycles. Behavioral strategies have also been recommended for shift work difficulties including strategic napping. While short naps during specific times of the day have been found to decrease sleepiness and increase vigilance levels, these naps are to be timed so as not to interfere with appropriate

sleep adaptation. For instance, if naps are utilized too frequently, they may ultimately shorten one's sleep drive (hence creating insomnia at bedtime) or create the desire for more frequent napping during work hours. One other precaution is that naps can also produce a transient period of sleep inertia—a groggy feeling on awakening that often leads to reduced levels of neurobehavioral functioning and performance.

NARCOLEPSY

Narcolepsy is a disorder characterized by four hallmark symptoms: (1) excessive daytime sleepiness which is most prominent, (2) cataplexy, (3) sleep paralysis, and (4) hypnagogic hallucinations. At times, the urge to sleep can be so irresistible that the individual experiences a sleep attack. It is primarily treated through the use of stimulants and antidepressants. Stimulants are the treatment of choice and are useful in keeping the individual awake but are not effective in relieving other symptoms and signs associated with the disorder (e.g., cataplexy, REM onset sleep). Antidepressants have been helpful in the regulation of REM sleep and cataplexy (Mahowald, 2002) and may even be helpful in managing depression that is often comorbid with narcolepsy.

Behavioral strategies that focus on psychoeducation, specifically the symptoms and risks associated with narcolepsy, may prove beneficial. As noted by Krahn, Black, and Silver (2001), behavioral management should focus on the prevention of sleep deprivation, by maintenance of regular sleep and wake times, engagement in a stimulating environment, and avoidance of shift work. Periodic naps throughout the day may also assist with some of the symptoms associated with narcolepsy. To minimize sleep inertia, shorter naps and sufficient wake-up times are recommended.

In addition, individuals with narcolepsy often confront interpersonal or occupational challenges that range from excessive sleepiness, yawning, or sleep attack, which can be quite socially embarrassing, to a lack of energy or motivation for social or occupational activity. As with any medical condition that leads to significant impact on quality of life, coping effectively with adverse sequelae is often paramount to therapeutic intervention. For example, because of social withdrawal or the inability to fully meet work expectations, negative self-evaluations or negative evaluations from others, and concomitant feelings of depression are not uncommon. Cognitive therapy targeted at these negative self-evaluations or catastrophic thinking, such as "I can't function at all when I am so sleepy," may be indicated as well as CBT for depression, if needed.

Sleep Apnea

Sleep apnea is a disordered breathing condition that is characterized by the constriction of the airway during sleep. Due to disrupted sleep throughout the night, individuals report tiredness, fatigue, sleepiness, memory and judgment problems, irritability, difficulty concentrating, and personality changes. Medical treatments involve nasal continuous positive airway pressure (CPAP), oral/dental devices, and surgical procedures to eliminate sleep fragmentation, apneas, and oxygen desaturation. CPAP, one of the most effective and widely used therapies, requires the patient to wear a mask. This mask fits over the apneic's face during sleep to assist with breathing. Despite the effectiveness of CPAP, the discomfort associated with wearing the mask, its cumbersome nature, and, for some, the sensation or fear of suffocation, often deters patients from its use. Therefore, compliance with utilization of the CPAP device is low and is an obstacle to effective management of sleep apnea (Sage, Southcott, & Brown, 2001). Cognitive-behavioral strategies can play a significant role by improving adherence and helping patients overcome their fears of suffocation.

Prochaska and colleagues' Stages of Change Model is a useful framework to increase motivation or readiness to change with a variety of behaviors (smoking cessation, weight loss, use of sunscreen), and may be well suited to conceptualize how to increase compliance to CPAP. The goal would be to use stage-appropriate strategies to motivate CPAP candidates from a precontemplative stage to contemplative stage, and eventually to the action and maintenance stage. To illustrate, consistent with the health belief model, if the symptoms are not perceived as distressful or if the treatment is worse than the problem itself, the patient may not readily engage in the recommended regimen, despite the adverse consequences to his or her mental and physical health. Motivational interviewing strategies, such as raising cognitive dissonance and evaluating use of CPAP through a cost-benefit analysis, may enhance readiness to adopt the therapy. Consequently, this may allow one to move someone from a precontemplative to contemplative stage, and furthermore to action and maintenance stages of change.

Alternatively, therapists might consider exposure-based models or systematic desensitization strategies to help patients overcome any anticipatory anxiety and fears of suffocation with regard to wearing the mask. Modeling may also be employed to demonstrate how fellow apnea patients successfully cope with the cumbersome treatment. Other treatment has focused on the reduction of snoring, sleepiness, and improvement in quality of life through the reduction of symptoms. More recently, researchers have begun to explore behavioral strategies that will assist apneics through the promotion of weight loss, avoidance of alcohol and other

sedatives before sleep, and avoidance of the supine sleep position, each of which exacerbates apnea.

RESTLESS LEGS SYNDROME/PERIODIC LIMB MOVEMENT SYNDROME

Diagnostic features of restless legs syndrome (RLS) include an uncomfortable sensation in the legs accompanied by the urge to move one's legs. This sensation begins or worsens during periods of inactivity and relief is brought about through movement of the limbs. Periodic limb movements in sleep (PLMS) are repetitive movements, most commonly seen in the lower limbs, that occur every 20–40 seconds and are typically brief muscle twitches, jerking movements, or an upward flexing of the feet. These movements can also be comprised of involuntary flexing of the hips, knees, and ankles that affect sleep in the initiation and maintenance stages and cause fatigue, exhaustion, and excessive daytime somnolence. Approximately 80% of patients with RLS also have PLMS.

While walking or stretching may temporarily alleviate the sensations, current treatment of these disorders has leaned toward medications such as benzodiazepines, opioids, and dopaminergic agents. From a behavioral perspective, some symptom relief may be derived from practice of good sleep hygiene (Hening, 2002). For individuals with a mild case of RLS, psychoeducation on sleep, wake, and activity regulation, sleep setting and influences, can assist the individual to regulate behaviors that may be contributing to or exacerbating the dysfunctional movements. These behaviors include regular and adequate sleep hours, as sleep deprivation tends to aggravate RLS. Exercise has been found to assist with the modification of RLS, yet only a moderate amount of exercise has been found to be beneficial since excessive exercise may cause increased exacerbation of symptoms (Hening, 2002). Although behavioral therapies show promise in the decrease of symptoms, empirical support for these findings is not yet available and it is unlikely that these will sufficiently alleviate suffering. For example, while massage and cold compresses may provide temporary relief of symptoms, their effects are not long-lasting. Overall behavioral changes need to be determined on an individual basis, by targeting which activities may worsen or improve the symptoms of RLS. Behavioral changes that have been reported to be helpful for individuals with this disorder include a healthy balanced diet, walking, stretching, hot or cold bath, massage, acupressure, and practicing relaxation techniques (such as biofeedback, meditation, or yoga). Additionally, some individuals report that keeping their minds engaged in other activities (discussion, needlework, video games) assists with problematic symptoms while traveling.

BRUXISM

Bruxism, a movement disorder characterized by the grinding or clenching of the teeth during sleep, is related to the level of stress experienced by an individual (Long & Miltenberg, 1998). If we are able to reduce one's level of stress, we thereby may be able to decrease bruxism. The severity of bruxism may even be an index of their level of stress. CBT has been found to be effective in the reduction of stress and anxiety (Chambless & Ollendick, 2000). Future treatment for this disorder should examine the contributions of anxiety, stress, and underlying cognition as this information could lead to the development of beneficial cognitive and behavioral interventions.

NIGHTMARES

According to the ICSD (1997), nightmares are frightening dreams that usually awaken an individual from REM sleep. The DSM-IV indicates that nightmares are characterized by repeated awakenings from a sleep period with comprehensive recall of extremely frightening dreams. Themes usually involve threats to survival, security, or self-esteem. Estimates are that 10–50% of children between 3 and 5 years old have nightmares that may disturb their parents and approximately 75% of individuals can remember one or more nightmares in the course of their childhood. While 50% of adults report having at least an occasional nightmare, the condition of frequent nightmares (1+ per week) occurs in only 1% of the population. The most common causes of nightmares are anxiety or stress, the death of a loved one, adverse reaction or withdrawal from drugs and/or alcohol, or other sleep disorders. When assessing nightmares, it is important to distinguish between night terror disorder, delirium, posttraumatic stress disorder, the physiological effects of substance use, or the presence of other sleep disorders since the etiology and treatment of each may vary. Therapies predominantly used for nightmares include psychoeducation about problematic sleep, sleep hygiene, and therapeutic groups where trauma-related nightmares are processed (Daniels & McGuire, 1998). Most recently, imagery rehearsal has been found to be helpful for those experiencing nightmares associated with PTSD as well (Krakow et al., 2001).

In children, simple behavioral strategies can be used to alleviate distress associated with the dark and bedtime. As indicated by Mindell (2003), many parents will enter a child's room and turn on the light if he or she is having a nightmare; this may reinforce the idea that the light equals security and the dark is something to fear. Thus, it may be helpful to comfort the child in the dark or in a semilit room.

Performing a functional analysis and determining what triggers, maintains, and reinforces nightmares may be of value to best understand these phenomena, particularly because nightmares are not caused by circadian changes per se; rather they coincide or can disrupt sleep/wake cycles.

SUMMARY AND FUTURE CONSIDERATIONS

Behavioral strategies and lifestyle modifications are paramount to managing sleep disorders and their sequelae. In addition to sleep hygiene, utilizing a cognitive-behavioral approach and conceptualization may produce additive benefit. Similar to helping patients with medical conditions, such as chronic pain or cardiovascular disease, examining the beliefs, attitudes, thoughts, and emotional responses of patients with sleep disorders is likely to provide an even greater understanding and treatment development compared to solely taking a medical-model approach. Charles Morin and colleagues address these factors in patients with insomnia and have achieved considerable success. Extending and combining these principles for patients with other sleep disorders may similarly provide a more comprehensive management compared to medical recommendations alone. While some strategies, such as systematic desensitization or exposure therapy, for CPAP users await further empirical validation, multifaceted approaches that address not only the physiology of sleep and their respective therapies, but also the cognitive aspects are likely to lead to the most holistic and successful responses. Cognitive-behavioral paradigms and techniques may provide new avenues for advancing the treatment of sleep disorders and for enhancing the quality of life among those who are challenged by these conditions.

REFERENCES

- Boivin, D. B., & James, F. O. (2003). Insomnia due to circadian rhythm disturbances. In M. P. Szuba, J. D. Kloss, & D. F. Dinges (Eds.), *Principles and management of insomnia* (pp. 155–191). New York: Cambridge University Press.
- Bromley, S. M., & Rajput, V. (1999). Chronic insomnia: A practical review. *American Family Physician*, 60(5), 1431–1438.
- Carskadon, M. A. (Ed.). (2002). *Adolescent sleep patterns: Biological, social, and psychological influences*. New York: Cambridge University Press.
- Chambless, D., & Ollendick, T. (2000). Empirically supported psychological interventions: Controversies and evidence. *Annual Review of Psychology*, 52, 685–716.
- Daniels, L., & McGuire, T. (1998). Dreamcatchers: Healing traumatic nightmares using group dreamwork, sand play and other techniques of intervention. *Group*, 22(4), 205–226.
- Hening, W. A. (2002). Restless legs syndrome. *Continuum: Lifelong Learning in Neurology*, 8(6), 63–88.

- International classification of sleep disorders, revised: Diagnostic and coding manual.* (1997). Rochester, MN: American Sleep Disorders Association.
- Krahn, L. E., Black, J. L., & Silver, M. H. (2001). Narcolepsy: New understanding of irresistible sleep. *Mayo Clinical Proceedings*, 76, 185–194.
- Krakow, B., Hollifield, M., Johnston, L., Koss, M., Schrader, R., Warner, T. D., Tandberg, D., Lauriello, J., McBride, L., Cutchen, L., Cheng, D., Emmons, S., Germain, A., Melendrez, D., Sandoval, D., & Prince, H. (2001). Imagery rehearsal therapy for chronic nightmares in sexual assault survivors with posttraumatic stress disorder: A randomized controlled trial. *Journal of the American Medical Association*, 286(5), 537–545.
- Long, E. S., & Miltenberg, R. G. (1998). A review of behavioral and pharmacological treatments for habit disorders in individuals with mental retardation. *Journal of Behavior Therapy and Experimental Psychiatry*, 29, 143–156.
- Mahowald, M. W. (2002). Narcolepsy and others causes of hypersomnia. *Continuum: Lifelong Learning in Neurology*, 8(6), 51–62.
- Mindell, J. A. (2003). Insomnia in children and adolescents. In M. P. Szuba, J. D. Kloss, & D. F. Dinges (Eds.), *Principles and management of insomnia* (pp. 125–135). New York: Cambridge University Press.
- Morin, C. M., Hauri, P. J., Espie, C. A., Spielman, A. J., Buysse, D. J., & Bootzin, R. R. (1999). Nonpharmacologic treatment of chronic insomnia. *Sleep*, 22(8), 1134–1156.
- Sage, C. E., Southcott, A., & Brown, S. (2001). The health belief model and compliance with CPAP treatment for obstructive sleep apnea. *Behaviour Change*, 18(3), 177–185.

RECOMMENDED READINGS

- Kryger, M. H., Roth, T., & Dement, W. C. (Eds.) (2000). *Principles and practice of sleep medicine*. Philadelphia: Saunders.
- Szuba, M. P., Kloss, J. D., & Dinges, D. F. (Eds.). (2003). *Principles and management of insomnia*. New York: Cambridge University Press.

Social Anxiety Disorder 1

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Keywords: social anxiety disorder, social phobia, anxiety disorders, adults, children

Social Anxiety Disorder (SAD), also known as social phobia, is characterized by an excessive and persistent fear of one or more social or performance situations. Individuals suffering from SAD endure these situations with acute discomfort, and a great many avoid them altogether. The anxiety and associated avoidance behavior can be crippling, making it difficult for those affected to sustain relationships or function adequately at work, school, or in daily activities.

The unrelenting and disruptive nature of SAD symptoms often leads to feelings of depression and hopelessness. Indeed, SAD is often accompanied by additional mood, anxiety, and substance use disorders (Schneier, Johnson, Hornig, Liebowitz, & Weissman, 1992).

SAD has garnered a great deal of research and clinical interest over the past two decades, due in part to a growing recognition of the prevalence of this disorder. Epidemiological data indicate that the lifetime prevalence rate of SAD among adults in the general population may be as high as 13% (Kessler et al., 1994). In the National Comorbidity Survey, SAD was the third most common mental disorder and the most prevalent of the anxiety disorders (Kessler et al., 1994). However, SAD is by no means restricted to adults. Approximately 5.5% of females and 2.7% of males between the ages of 14 and 17 years are afflicted with SAD (Wittchen, Stein, & Kessler, 1999). As with adults, children and adolescents who meet criteria for SAD are beset by numerous adverse outcomes including having few or no friends, deficits in social skills, loneliness, and dysphoria (Beidel, Turner, & Morris, 1999).

TREATMENT FOR ADULTS

The most widely investigated treatment approach for SAD is cognitive-behavioral therapy (CBT). The various treatment strategies that fall under this rubric differ with respect to technique but share certain key characteristics. All are time-limited and empirically guided interventions that, to varying degrees, aim to modify the cognitive, physiological, and behavioral components that contribute to, or maintain, social anxiety symptoms. These therapies include relaxation and social skills training, but most often involve guided, systematic exposure to feared situations and cognitive restructuring techniques. More detailed descriptions of these treatment strategies are provided by several comprehensive reviews (e.g., Turk, Fresco, & Heimberg, 1999).

One particular form of CBT that has earned substantial empirical support is Heimberg's cognitive-behavioral group therapy (CBGT). CBGT is a multicomponent treatment program that integrates cognitive restructuring with therapist-guided exposure exercises that are practiced both in and out of session (Heimberg & Becker, 2002). CBGT was included in a list of empirically supported treatments by the Society of Clinical Psychology's Task Force on Promotion and Dissemination of Psychological Procedures (Chambless et al., 1996). Additionally, CBGT has been associated with enduring benefits; patients who received CBGT maintained treatment gains as long as 4 to 6 years after treatment had ended (Heimberg, Salzman, Holt, & Blendell, 1993).